

**A- Select false or true of the following statements :( 10 Marks)**

1. 1200 MB (Mega byte) equal 1.2 TB (Tera Byte).X
2. Reading is the process of storing/saving the information to the secondary storage device.X
3. System Clock holds current data & time.X
4. Desktop is kind of Minicomputers.X
5. Mailing Lists allow direct "live" communication.X
6. Filters are an Internet standard that allows you to connect to another computer on the internet.X
7. Initial Investigation includes gathering and analyzing data.X
8. Field: is an integrated collection of logically related tables.X
9. Tactical models assist top-level managers in long-range planning.X
10. MIS record day-to-day transactions to support supervisors.X

**B- Choose the right answer :( 5 Marks)**

**Utilities or service programs are:**

- a. Most important system software program that interacts with the application software and the computer.
- b. Perform *specific tasks related to managing computer resources*.X
- c. Specialized programs to allow particular input and output devices to *communicate with the rest of the system*.

**Embedded operating system stored in:**

- a. RAM
- b. ROM X
- c. Hard Disk

**Acquiring hardware is part of:**

- a. System analysis phase.
- b. System development phase.
- c. System design phase. X

**The relationship in Hierarchical Database are:**

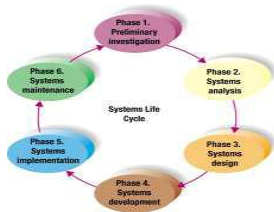
- a. One-to-many. X
- b. Many-to-many.
- c. one-to-one.

**Trojan horses are:**

- a. programs that migrate through networks and operating systems.
- b. A special type of virus that does not attach itself to programs and databases.
- c. programs that come into a computer system disguised as something else. X

**C- Answer following: :( 30 Marks, 5 each)**

1. What are the three areas of Artificial intelligence (AI).
  - Virtual reality
  - Knowledge-based (expert) systems
  - Robotics
2. Identify and describe the various physical and wireless communication channels.
  - physical : use a solid medium to connect sending and receiving devices.
    - i. Telephone lines
    - ii. Coaxial cable
    - iii. Fiber-optic cable
  - wireless : do not use a solid substance to connect sending and receiving devices, they move data through the air.
    - i. Infrared
    - ii. Broadcast radio (wifi)
    - iii. Microwave (bluetooth)
    - iv. Satellite
3. Write four needs of databases.
  - Sharing – one department to another
  - Security – passwords to access,
  - Less data redundancy
  - Data integrity
4. Draw the diagram of six steps of system analysis and design.



5. Write four of computer ethics issues .

- Privacy
- Accuracy
- Property
- Access

6. Describe the different reports and their roles in managerial decision making.

- Periodic
- Exception
- Demand

summarizes the detailed data of the TPS in standard reports for middle-level managers

**D- Fill the space with correct word: :( 10 Marks)**

Collect, *Resource* , Follow , Text-based , Store, Record, Now, warehouse, Translate , Manipulates.

1. Microprocessor .....10..... data to produce information.
2. Procedures: the rules or guidelines people ...3..... when using software, hardware, and data.
3. Input devices .....9.....data that humans can understand into a form that computer can process.
4. *Domain name or name of the server where the ...2.....is located*
5. Word processing software is used to create .....4.....documents.
6. Accuracy relates to the responsibility of those who ...1...data
7. Ad network or adware cookies ...6....your activities across different sites.
8. Real-time processing, or what we might call ...7.....
9. Strategic uses Special type of database called data...8.....
10. secondary storage is designed to ...5...information.

**E- Link the equivalent words of following groups: :( 5 Marks)**

1. Mac
2. Controller cards
3. *Microphone*
4. Table
5. Distributed
6. Grid charts
7. Pilot
8. Multidimensional
9. Word
10. Uninstall

- a. System software 10
- b. Application software 9
- c. Operating system 1
- d. Database uses 5
- e. Types of conversion 7
- f. Database structure 8
- g. Collection of related records. 4
- h. Analyzing tools 6
- i. Expansion cards 2
- j. Input device 3

**F- Select false or true of the following statements :( 20 Marks, 2 marks each)**

11. In Object-Oriented Database, Objects contain only instructions X
12. Analysis tasks include designing alternative systems. X
13. Crackers, typically, they are not criminals. X
14. TPS doesn't call data processing systems (DPS) X
15. Middle Management has only vertical information needs. X
16. *Specialized applications : widely used in nearly every discipline & occupation.* X
17. Software: the rules or guidelines people follow when using software, hardware, and data. X
18. 1200 MB (Mega byte) more than 1.2 TB (Tera Byte). X
19. CMOS chips holds programs. X
20. Mainframe is kind of Minicomputers. X

**G- Choose the right answer :( 10 Marks, 2 marks each)**

**In Object-Oriented Database, Methods are:**

- a. specific instances of a class that can contain both data and instructions to manipulate the data.
- b. the data fields an object possesses.
- c. instructions for retrieving or manipulating attribute values. X

**What is the Output:**

- a. A Monitor.
- b. Any data or instructions used by a computer.
- c. Processed data or information. X

**Embedded OS used to:**

- a. Control a single desktop or notebook computer.
- b. control and coordinate computers that are linked together.
- c. handheld computers. X

**Operational models :**

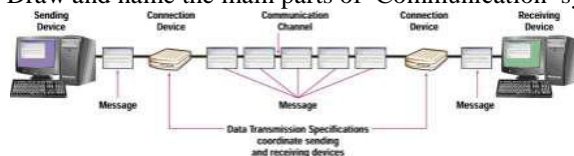
- a. assist top-level managers in long-range planning
- b. help middle-level managers control the work of the organization
- c. help lower-level managers accomplish the organization's day-to-day activities. X

**Web bugs are:**

- a. Small images or HTML code hidden within an e-mail message. X
- b. Small pieces of information deposited on your hard disk from Web sites you have visited.
- c. Programs designed to secretly record and report an individual's activities on the Internet.

**C. Answer following: :( 30 Marks, 5 each)**

1. Draw and name the main parts of Communication system's diagram.



2. Write four of subsystems of a database management system.
  - Data definition subsystem
  - Data manipulation subsystem
  - Application generation subsystem
  - Data administration subsystem
3. What are the two most common optical disk formats? Describe the basic types for each format.
  - **CD** : Typically store 650 MB to 1 GB
    - Read only: CD-ROM, like commercial music CD
    - Write once: CD-R, write once, read many times but cannot be written again.
    - Rewriteable: CD-RW, write many times, read many times
  - **DVD** : DVDs can store 4.7 GB to 17 GB on a single disk
    - Read only: DVD-ROM: Written at manufacturing plant, read many.
    - Write once: DVD+R; DVD-R : Write once, read many, used for archiving data and video files
    - Rewritable: DVD+RW; DVD-RW; DVD-RAM: Write many, read many
4. What is the difference between a function and a formula? How is a formula related to what if analysis?
 

Formulas are instructions for calculations that use numbers in referenced cells.  
 For example, the formula A25 – B12 means to subtract the value in cell B12 from the value in cell A25.  
 Functions are prewritten formulas that do calculations automatically.  
 For example, =SUM(C10:C20) adds all the values in the range or series of cells C10 to C20.
5. Define the network strategy and write the three common network Strategies.
 

Strategy is a way of coordinating the sharing of information and resources

Common network Strategies:

  - Terminal
  - Client/server
  - Peer-to-peer
6. What is the data model and what are the five data models (DBMS, data structures)
 

Data models define rules and standards for data in a database – the five data models are:

  - Hierarchical database
  - Network database
  - Relational database
  - Multidimensional database
  - Object-oriented database

**D- Fill the space with correct word: :( Canceled)**

Transferring, Object, Manipulation, Numeric , Access , Analytical, Denial, Malicious, Data, Home

1. Computer crime can take various forms including the creation of ...8....programs.
2. FTP is an Internet service for ...1....files.
3. Computer crime can take various forms including ...7....of service attacks.
4. Hardware: the equipment that processes the ...9.. to create information.
5. Computer crime can take various forms including data...3....
6. Decision support systems (DSS) use data from TPS and a set of flexible ...6...tools.
7. Attributes are the data fields an ...2...owns.
8. Providers give us .....5... to the Internet.
9. Spreadsheets are used to organize, analyze, and graph .....4.... data
10. Personal suite contain personal software applications or programs to be used by ...10....users.

**D. Link the equivalent words of following groups: :( Canceled)**

1. Record	a. Database structure 4
2. Company or shared	b. Application software 5
3. Checklist	c. Output device 10
4. Object-oriented	d. Operating system 9
5. Access	e. Collection of related fields. 1
6. Backup	f. Database uses 2
7. Joystick	g. Analyzing tools 3
8. Interface cards	h. System software 6
9. Network OS	i. Expansion cards 8
10. Display	j. Input device 7

**H- Select false or true of the following statements :( 10 Marks)**

21. Utilities allow input devices to communicate with the rest of the computer system.F
22. Memory of secondary storage provides temporary storage.F
23. Data on ROM chips can be changed by the user.F
24. Metasearch engines focus on subject-specific Web sites. F
25. Table: group of related characters.F
26. Design phase includes acquiring software.F
27. 1200 MB (Mega byte) less than 1.2 TB (Tera Byte).T
28. In Object-Oriented Database, Objects contain only data.F
29. The five phases make up the systems life cycle of software development.F
30. TPS called data processing systems (DPS).T

**I- Choose the right answer :( 5 Marks)**

**Primary key is:**

- a. Record that contains all the information about one person, thing, or place.
- b. filed that uniquely identifies each record.X
- c. smallest unit of information about a record.

**Gathering data is part of:**

- a. System analysis phase.X
- b. System development phase.
- c. System design phase.

**Methods are:**

- a. specific instances of a class.
- b. the data fields an object owns.
- c. instructions for retrieving or manipulating attribute values.X

**Spyware are:**

- a. small images or HTML code hidden within an e-mail message.
- b. small pieces of information deposited on your hard disk from Web sites you have visited.
- c. programs that secretly record and report an individual's activities on the Internet.X

**Object Linking and Embedding (OLE) is:**

- a. A type of communication.
- b. A kind of networking.
- c. A way to share data between applications. X

**J- Answer following: :( 30 Marks, 5 each)**

- What are the basic elements of an e-mail message?
  - Header
    - Address
    - Subject
    - Attachment
  - Message
  - Signature
- What is system software? What kinds of programs are included in system software?
 

System software works with end users, application software and computer hardware to handle technical details like where a program is stored, how commands are converted to get processed, where a document or file is saved, how output is printed. System software is *not a single program. It is a collection or a system of programs.*

  - Operating system
  - Utilities
  - Device drivers
  - Language translators

- Draw the diagram of six steps of software development.



- What are the four basic elements of communication system.
  - Sending and receiving devices
  - Communication channel
  - Connection devices
  - Data transmission specifications
- Define the operating systems and write its three types of functions.
 

A collection of programs that handle technical tasks, Performs three types of functions

  - Manages computer resources include *memory, processing, storage, input & output devices.*
  - Provides user interface (GUI)
  - Runs applications: most OS allows running of more than one application at a time.
- Name and discuss the five common functions of most organizations.
 

Organizations can be viewed from a functional perspective and include:

  - Accounting
  - Marketing
  - Human Resources
  - Production
  - Research

#### K- Fill the space with correct word: :( 10 Marks)

Outside, Manages , Access , Programs, Control, Financial, Beats , Information, Primary, Secure.

- Filters are programs that allow parents or organizations to block .....3....to selected sites and set time limits
- Specialized suite focus on specific applications like ...6.....planning suites.
- System Clock Produces electrical .....7....
- Operating system .....2....computer resources include *memory*.
- Security : how can we ...10....hardware and software.
- Traditional cookies provide ...8.....to a single site.
- Worms are a special type of virus that does not attach itself to ...4.....and databases.
- Top-level managers need information from ...1....the organization.
- Tactical models help middle-level managers ...5....the work of the organization
- Unique identifier also known as ...9.....field

#### E. Link the equivalent words of following groups: :( 5 Marks)

1. Language translators	a. System software 1
2. Linux	b. Database uses 5
3. Field	c. Analyzing tools 6
4. Scanner	d. Database structure 7
5. Web database	e. Group of related characters 3
6. Data flow diagrams	f. Types of conversion 8
7. Relational	g. Application software 10
8. Phased	h. Operating system 2
9. TV Tuner	i. Expansion cards 9
10. Expansion cards	j. Input devices 4

**L- Select false or true of the following statements :( 10 Marks)**

31. 1200 MB (Mega byte) equal 1.2 GB (Giga Byte). T
32. Periodic evaluation is part of systems maintenance. T
33. Crackers, typically, they are criminals. T
34. Accuracy relates to who owns data and rights to software. F
35. Top Management has only vertical and horizontal information needs. F
36. URL: rules to exchange data between computers F
37. Graphical User Interface (GUI) is a part of hardware. F
38. Secondary storage devices are used to save information that is used most frequently..F
39. Access time: how much the storage can store.F
40. In Directory search: The user enters a keyword or phrase reflecting the information desired. F

**M- Choose the right answer :( 5 Marks)**

**Attributes are:**

- d. specific instances of a class.
- e. the data fields an object owns.X
- f. instructions for retrieving or manipulating attribute values.

**Plug-ins is:**

- a. an Internet standard that allows you to connect to another computer.
- b. an Internet service for transferring files.
- c. a program that automatically loads and operates as part of your browser. X

**RAID is:**

- a. Groups of inexpensive hard-disk drives are grouped together. X
- b. Hard-Disk Cartridges.
- c. Removable hard disk, Massive storage capacity, Common in mainframes.

**Language translators:**

- a. convert programming instructions into a language that computers process. X
- b. translate numbers, letters that people understand into a form that computer can process.
- c. translate the machine language back into form that people can understand.

**Integrated Packages are:**

- a. A single program that provides the functionality of several widely used programs. X
- b. A group of application programs.
- c. A specialized application software.

**D. Answer following: ( 30 Marks, 5 each)**

1. Write the five classifications of databases.
  - Individual or microcomputer database
  - Company or shared
  - Distributed
  - Commercial
  - Web database
2. What are the four types of terminals?
  - Dumb terminal
  - Intelligent terminal
  - Network terminal
  - Internet terminal
3. Draw the star network topology and name its main parts.



4. Describe some different types of basic applications and specialized applications.

- Basic applications (*general-purpose applications*): *widely used in nearly every discipline & occupation*. Examples include: Browsers, Word processors, Spreadsheets, Database management systems, Presentation graphics.
  - Specialized applications (*special-purpose applications*): *Narrowly focused on specific disciplines and occupations*. Examples include: Graphics programs, Audio/video editors, Multimedia creation, Web authoring, Virtual reality.
5. Write the four types of connection Services and their speeds.
    - Dial up 56kb/sec
    - DSL 1.5 MB/sec
    - Cable modem 1.5 MB/sec
    - Satellite 900KB/sec
  6. Discuss the various kinds of computer criminals.
    - Employees
    - Outside users
    - Hackers and crackers
    - Organized crime
    - Terrorists

**D- Fill the space with correct word: :( 10 Marks)**

Link , Records, Vertical , Instructions, Unprocessed, Resources, Threats, Single, Based , Directory.

1. Privacy – What are the ...7....to personal privacy.
2. Traditional cookies provide information to a ...8...site.
3. Supervisor has only ...3.....-primarily information needs.
4. Data: the raw, ...5.....facts
5. Browsers provide access to web...6.....
6. if you want general information use the ...10.....search approach.
7. Web ...9.....applications are not owned and stored on ones computer.
8. Join: association or ...1...between a field in one table or query and a field in another table or query
9. TPS Creates and ...2....events in databases
10. A program is a list of ...4....for the computer to follow.

**D. Link the equivalent words of following groups: :( 5 Marks)**

1. Database	a. Database structure 9
2. Individual database	b. Analyzing tools 8
3. Unix	c. collection of related tables 1
4. Web cam	d. Database uses 2
5. TV Tuner	e. Types of conversion 10
6. Utilities	f. System software 6
7. Browsers	g. Application software 7
8. Decision tables	h. Operating system 3
9. Hierarchical.	i. Expansion cards 5
10. Pilot	j. Input device 4

**N- Select false or true of the following statements :( 10 Marks)**

41. Utilities allow output devices to communicate with the rest of the computer system. F
42. Form : printed output generated from tables or queries. F
43. Memory of primary storage provides *permanent storage*. F
44. Specialized search engines automatically submit your search request to several search engines . F
45. Character: is a collection of related records. F
46. 1200 MB (Mega byte) more than 1.2 GB (Giga Byte). F
47. In Relational Database, Objects contain both data and instructions T
48. Snoopware records virtually everything you do on your computer. T
49. Privacy concerns the collection and use of data about individuals. T
50. Crackers, typically, they are not criminals. F

**O- Choose the right answer :(5 Marks)**

**Image Editors are:**

- a. Programs used to create & edit vector images.
- b. Programs for creating and editing bitmap images. X
- c. Programs that allow you to create publications.

**Internal Hard Disk is:**

- a. Hard-Disk Cartridges.
- b. Removable hard disk, Massive storage capacity, Common in mainframes.
- c. fixed disk and used to store the operating system and major applications. X

**Selecting the best system is part of:**

- d. System analysis phase.
- e. System development phase.
- f. System design phase. X

**Cookies are:**

- a. small images or HTML code hidden within an e-mail message.
- b. small pieces of information deposited on your hard disk from Web sites you have visited. X
- c. programs that are secretly record and report an individual's activities on the Internet.

**Software Suites are:**

- a. A single program that provides the functionality of several widely used programs.
- b. A group of application programs. X
- c. Specialized application software.

**P- Answer following: :( 30 Marks, 5 each)**

1. Give five of Database Features.
  - Tables
    - Records
    - Fields
  - Record sorting
  - Queries
  - Forms
  - Reports
2. Draw the six step software development diagram.



3. What are the three type of memory chips and what each type holds?
  - RAM, Random Access Memory : holds programs and data.
  - ROM, Read Only Memory – fixed start-up instructions
  - CMOS, Complementary Metal Oxide Semiconductor – flexible start-up instructions
4. Write four forms of Computer crimes.
  - Creation of malicious programs
  - Denial of service attacks
  - Internet scams
  - Data manipulation
5. Write the three basic categories of operating systems and give example of each.
  - Embedded – Used for handheld computers, stored in its ROM memory, windows CE.
  - Network OS – Used to control and coordinate computers that are linked together, Windows NT server, located on one computer's HD.
  - Stand-alone OS – Control a single desktop or notebook computer, Windows 7.
6. Define and discuss the four principal network topologies.
 

Architecture describes how a network is arranged Arrangement is called topology

Types of network topology

  - Star
  - Bus
  - Ring
  - Hierarchical

**Q- Fill the space with correct word: :( 10 Marks)**

Detailed, Hidden, Analyzing , Private, Service , *Address* , Visually , Processed, Uniquely , *Standard*,



1. *RAM* stores ...8.....information before it is output.
2. URL : is an ...6.....*or location of the resources or web sites*.
3. Telnet is an Internet...10.... allows to connect to another computer (host) on the internet.
4. Web bugs are small images or HTML code ...2.....within an e-mail message.
5. Firewalls - security buffer between the corporation's ...4.....network and all external networks.
6. Supervisors need.....1..., very current, day-to-day information on their units
7. DSS Provides a Flexible tool for ...3....data
8. Primary key: a field that ...9.....identifies each record.
9. Presentation programs create ...7....interesting presentations
10. (B2B) : Involves the sale of a product or ...5.....from one business to another

**E . Link the equivalent words of following groups: :( 5 Marks)**

1. Power point
2. Linux
3. Modem
4. Field
5. Individual database
6. Checklist
7. Network
8. Parallel
9. MIDI
10. Device drivers

- a. System software 10
- b. Analyzing tools 6
- c. Database structure 7
- d. Database uses 5
- e. Group of related characters 4
- f. Type of conversion 8
- g. Application software 1
- h. Operating system 2
- i. Expansion cards 3
- j. Input device 9